

IN THE CLAIMS

Please amend the claims as follows, substituting any amended claim(s) for the corresponding pending claim(s):

- 1 1. (Original) A method for manufacturing an on-chip inductor comprises:
2 creating a dielectric layer; and
3 creating a conductive winding on the dielectric layer, wherein the conductive winding has a
4 substantially square geometry, wherein corners of the conductive winding are geometrically shaped to
5 reduce impedance of the on-chip inductor at an operating frequency.
- 1 2. (Original) The method of claim 1, wherein the creating of the conductive winding further
2 comprises: creating the geometric shaping of the corners to include an interior angle per corner of
3 approximately ninety degrees, and an exterior angle per corner of approximately one hundred thirty-five
4 degrees.
- 1 3. (Original) The method of claim 1, wherein the creating of the conductive winding further
2 comprises: creating the geometric shaping of the corners to include an interior angle per corner of
3 approximately one hundred thirty-five degrees, and an exterior angle per corner of approximately one
4 hundred thirty-five degrees.
- 1 4. (Original) The method of claim 1 further comprises: creating the conductive winding to have a
2 spiral configuration, wherein the corners of the spiral configuration are geometrically shaped to reduce
3 impedance of the on-chip inductor at the operating frequency.
- 1 5. (Original) The method of claim 1, wherein the creating of the conductive winding further
2 comprises: creating a first winding on a first layer; creating a second winding on a second layer; and
3 connecting the first winding to the second winding with at least one bridge.
- 1 6. (Original) The method of claim 1, wherein the creating of the conductive winding further
2 comprises: creating the geometric shaping of the corners to include angled exterior corners, wherein at
3 least one angle per exterior corner reduces current turbulence in the corner at the operating frequency.
- 1 7. (Original) The on-chip inductor of claim 6, wherein the creating of the conductive winding
2 further comprises: creating the geometric shaping of the corners to include angled interior corners,
3 wherein at least one angle per interior corner further reduces current turbulence in the corner at the
4 operating frequency.

1 8. (Withdrawn) A method of manufacturing an on-chip transformer comprises:
2 creating primary conductive winding that has a substantially square geometry, wherein corners of
3 the primary conductive winding are geometrically shaped to reduce impedance of the primary conductive
4 winding at an operating frequency; and
5 creating secondary conductive winding that has a substantially square geometry, wherein corners
6 of the secondary conductive winding are geometrically shaped to reduce impedance of the secondary
7 conductive winding at an operating frequency, wherein the secondary conductive winding is magnetically
8 coupled to the primary conductive winding.

1 9. (Withdrawn) The method of claim 8, wherein the creating of the primary and secondary
2 conductive windings further comprises:
3 creating the geometric shaping of the corners to include an interior angle per corner of
4 approximately ninety degrees, and an exterior angle per corner of approximately one hundred thirty-five
5 degrees.

1 10. (Withdrawn) The method of claim 8, wherein the creating of the primary and secondary
2 conductive windings further comprises:
3 creating the geometric shaping of the corners to include an interior angle per corner of
4 approximately one hundred thirty-five degrees, and an exterior angle per corner of approximately one
5 hundred thirty-five degrees.

1 11. (Withdrawn) The method of claim 8 further comprises:
2 creating dielectric layer;
3 creating the primary conductive winding on the dielectric layer, wherein the primary conductive
4 winding includes a spiral configuration, wherein the corners of the spiral configuration are geometrically
5 shaped to reduce impedance of the primary conductive winding at the operating frequency; and
6 creating the secondary conductive winding on the dielectric layer, wherein the secondary
7 conductive winding includes a secondary spiral configuration interwoven with the spiral configuration of
8 the primary conductive winding, wherein the corners of the secondary spiral configuration are
9 geometrically shaped to reduce impedance of the secondary conductive winding at the operating
10 frequency.

1 12. (Withdrawn) The method of claim 8 further comprises:
2 creating a first dielectric layer;
3 creating the primary conductive winding on the first dielectric layer, wherein the primary
4 conductive winding includes a spiral configuration, wherein the corners of the spiral configuration are
5 geometrically shaped to reduce impedance of the primary conductive winding at the operating frequency;
6 creating a second dielectric layer juxtaposed to the primary conductive winding; and
7 creating the secondary conductive winding on the secondary dielectric layer, wherein the
8 secondary conductive winding includes the spiral configuration, wherein the corners of the spiral
9 configuration are geometrically shaped to reduce impedance of the secondary conductive winding at the
10 operating frequency.

1 13. (Withdrawn) The method of claim 8, wherein creating each of the primary and secondary
2 conductive windings further comprises:
3 creating a first winding on a first layer;
4 creating a second winding on a second layer; and
5 connecting the first winding to the second winding with at least one bridge.

1 14. (Withdrawn) The method of claim 8, wherein the creating of the primary and secondary
2 conductive windings further comprises:
3 creating the geometric shaping of the corners to include angled exterior corners, wherein at least
4 one angle per exterior corner reduces current turbulence in the corner at the operating frequency.

1 15. (Withdrawn) The method of claim 14, wherein the creating of the primary and secondary
2 conductive windings further comprises:
3 creating the geometric shaping of the corners to include angled interior corners, wherein at least
4 one angle per interior corner further reduces current turbulence in the corner at the operating frequency.